

REMARKS

Initially, Applicants note that the Information Disclosure Citation (Form PTO-1449) has the Japanese patents initialed but not U.S. Patent No. 4,839,393 listed thereon and submitted therewith. Applicants request a copy of the subject form with the subject U.S. patent No. 4,839,393 duly initialed by the Examiner.

Turning to the Office Action, dependent claim 8 was rejected under 35 U.S.C. § 112 as indefinite for reciting "said binder" when claim 3, on which it depends, does not recite a binder. Claim 8 is amended hereinabove to depend from claim 4, which does recite the binder and therefore provides direct antecedent basis for this limitation. Accordingly, withdrawal of this rejection is requested.

Original claims 11 and 13-15 were rejected as anticipated by Takashi Japanese Patent No. 08-258059 (hereinafter " '059 patent"). In that respect, it is indicated that the '059 patent has an inverted mushroom cavity for filing skin layer (4) with a top opening between two side flanges constituting a "supply port". The cavity is also said to have a suction hole 10 (*sic.*, holes 10') connected to a vacuum pump constituting a "suction port" and "pumping source" of claim 11. The '059 patent container is also said to have a lid mold (9) movable between an open position and a closed position to thus constitute a "sliding block."

While the invention of claim 11 has some common elements in a broad sense with the '059 patent and other molding apparatus, the interrelation and arrangement of the elements, as claimed, differs significantly, as does the functional result. Claim 11 is directed to the embodiment of the invention of Figs. 8-11.

The container of the amended claim 11 is a container for forming a padded body by supplying a predetermined amount of a granular or fragmental filler to the inside of a skin layer formed in a bag shape, as this claim is amended to recite. Such supply is made by producing airflow from the supply port to the inside of

the skin layer. Such airflow can be produced by a relatively large supply port. If a plurality of smaller supply ports is used, airflow is dispersed and weak. However, the larger supply port in the container prevents forming the padded body in a predetermined shape. Accordingly, when the padded body is formed in a predetermined shape, the slide block is slid to the closing position and closes the supply port in accordance with the invention of the amended claim 11.

On the other hand, in the '059 patent, a plurality of small ports is provided in the mold 6. When the inside of the mold 6 is exhausted, a sheet 4 is deformed so that the sheet is fitted to the interior surface of the mold 6 (see Figs. 2 and 3). If a larger port(s) is provided in the mold 6, the sheet cannot be fit to the interior surface. Since such small ports 10' do not prevent forming the padded body in a predetermined shape, the mold 6 of the '059 patent does not need to close the small ports and does not have any mechanism to close the small ports. However, such small ports cannot produce airflow enough to supply a predetermined amount of the filler to the deformed sheet (the predetermined filler is not supplied to the inside of the deformed sheet and overflows as shown in Fig. 4). Further, the movement of the lid mold (9) of the '059 patent to compress the filler does not control the opening and closing of a supply port as amended claim 11 requires. Amended claim 11 clearly patentably distinguishes the '059 patent in multiple respects.

The Office Action indicates with regard to independent claim 14 that the '059 patent has a form block with an "inner space" directly below the air suction mouth 10' (sic., mold wall 10) defining a padding container having a "suction port" 10' connected to the inner space. The tube 8 is said to be a "supply port." The molding cavity in the form block is said to be a "pre-molding container" with the two flanges constituting an "entry" for supplying filler.

Again the elements of the '059 patent are not positioned and interconnected in the manner specified in claim 14. Claim 14 is directed to the embodiment of the invention depicted in Fig. 12 and described as Example 3.

Initially, claim 14 requires that the pre-molding container is provided in the

inner space. According to the Office Action, this would place the form block molding cavity in the space below the suction mouth 10 in the '059 patent, which is clearly not the case. Thus the arrangement of components in the '059 patent is fatally deficient.

Claim 14 has also been amended to recite, "said entry being connected to said supply port by connecting means" and "said connecting means is removable from said entry and said supply port". This feature is shown in Fig. 12. Furthermore, "formed in a bag shape" is also inserted in claim 14.

In the invention of the amended claim 14, a pre-molding container is provided in a padding container. Pre-mold containers having the cavity of various sizes can be provided in the padding container to form a padded body of various sizes. Of course, such a pre-mold container is fixed in the padding container during operation. In the padding container of the amended claim 14, the entry is connected to the supply port by "connecting means" so that a filler is supplied to the inside of the skin layer formed in a bag shape by airflow from the supply port to the inside of the skin layer. There is no "connecting means" between the entry and the supply port of the '059 patent as these elements are defined in the Office Action. When another bag is to be positioned in the pre-molding container or another pre-molding container is to be positioned in the padding container, the connecting means is removed from the entry and supply port. Such a padding container, pre-molding container and connecting means are not disclosed or suggested in the '059 patent. Claim 14 as amended is clearly patentably distinguishable over this art.

Dependent claim 15 contains independently patentable subject matter specifying that the "connecting" means is a funnel. No possible response to this limitation exists in the '059 patent.

Claims 3-8, 12, 16 and 17 were rejected under 35 U.S.C. § 103 as unpatentable over the '059 patent in view of Hughes U.S. Patent 5,132,063 (hereinafter "Hughes '063 patent"). In that respect, the Office Action indicates that the '059 patent discloses the preparation of a skin layer formed in a bag

shape with an opening for supplying foam chips 5'. The skin is prepared in a form block 6 which has an inner space, an air suction tube 10 and an opening between the top flanges constituting a supply port. Further, the '059 patent is said to teach a vacuum source connected to the suction tube to shape the skin layer to conform to the dimensions of the cavity.

The Office Action also acknowledges with respect to the '059 patent that it is "unclear if the skin layer includes a porous part and if the vacuum source provides airflow to the inside of the skin layer to help supply the form [sic] chip (5)."

It is then asserted in the Office Action that Hughes '063 teaches a process for manufacturing a padded element and suggests that the process does away with the need to use trim cover material having an air and/or foam impervious layer. Fig. 4 of Hughes '063 is said to show an air pervious fabric placed in a mold with vacuum means used to retain the trim cover in place. Further, it is said that Hughes '063 suggests the foam layers' expansion in the mold to the trim cover may be assisted by the vacuum applied to the chamber as denoted by the arrows in Fig. 4. From this it is concluded it would have been obvious to provide the vacuum of the '059 patent not only to position and retain the skin layer in the mold but also to provide suction through the skin layer to aid in supplying and expanding the foam chips in the cavity of the form block.

Each of independent claims 3, 5 and 6 recites the step of "supplying a predetermined amount of said filler to the inside of said skin layer by use of said airflow to form the padded body." The Office Action admits that the '059 patent does not employ airflow to supply filler to the inside of the skin layer. The Hughes '063 does not supply such a teaching. Hughes '063 merely indicates that where trim cover 55 is air permeable vacuum can be used to facilitate expansion of foam composition 85. The foam composition 85 is poured into the mold as disclosed in Fig. 3 and the related description. There is absolutely no teaching or suggestion in Hughes '063 of using airflow to supply filler to the inside of a skin layer. In fact, such would not appear to be possible with a liquid foamable

polymeric composition which is employed. Independent claims 3, 5 and 6 thus patentably distinguish the '059 patent and Hughes '063.

It is also noteworthy that, as shown in Figs. 2 and 3 of the '059 patent, a sheet 4 is positioned on the mold 6. When the inside of the mold 6 is exhausted through a plurality of small port 10', the sheet 4 is deformed as an inverted shaped mushroom and fitted to the interior surface of the mold 6. If the exhaust stops, then the deformed sheet 4 returns to its original position. Therefore, a skin layer formed in a bag shape is not prepared in the '059 patent. As shown in Fig. 4 of the '059 patent, when a predetermined amount of a filler is supplied in the deformed sheet 4, the filler overflows from the sheet 4. Thus, a padded body is not formed. Though the sheet is a sheet without an air impervious barrier, the sheet might be fitted to the interior surface of the mold 6, as shown in the Hughes '063 patent. However, small ports of the mold 6 of the '059 patent cannot produce airflow enough to supply a predetermined amount of the filler to the inside of the deformed sheet 4. The lid mold 9 is air cylinder actuated to press the filler overflowed from the deformed sheet therein. The use of airflow to supply filler is in no way contemplated.

Claim 4 also distinguishes the prior art in reciting "setting the padded body in a molding container having a predetermined cavity". Since the deformed sheet 6 of the '059 patent returns to its original position when the exhaust stops, as mentioned above, even though a predetermined amount of the filler is supplied in the inside of the deformed sheet by using a lid mold 9, the padded body cannot be set in a molding container having a predetermined cavity.

Claim 5 is also amended to recite "said port being closed by said slide block when said slide block is moved into said closing position". As mentioned above in conjunction with the apparatus claims, any padding and molding container with a port that can be closed by a slide block is not disclosed or suggested in the '059 patent or Hughes '063.

Claims 6 is also amended to recite "means for removably connecting between said input port and said supply port." Such a padding container, pre-

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molding container and connecting means as stated in claim 6 are not disclosed or suggested in the '059 patent or the Hughes '063 patent.

In view of the above amendments to the claims and related discussion reconsideration and favorable action on claims 3-8 and 11-17 is earnestly solicited.

Respectfully submitted,



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